

UC Davis

UC Davis Previously Published Works

Title

Correction: A Novel Role for the TIR Domain in Association with Pathogen-Derived Elicitors.

Permalink

<https://escholarship.org/uc/item/6mj8j479>

Journal

PLoS biology, 14(1)

ISSN

1544-9173

Authors

Burch-Smith, Tessa M
Schiff, Michael
Caplan, Jeffrey L
et al.

Publication Date

2016

DOI

10.1371/journal.pbio.1002374

Peer reviewed

CORRECTION

Correction: A Novel Role for the TIR Domain in Association with Pathogen-Derived Elicitors

Tessa M Burch-Smith, Michael Schiff, Jeffrey L Caplan, Jeffrey Tsao, Kirk Czymmek, Savithramma P Dinesh-Kumar

There were some errors in the preparation of the middle panel of [Fig 4](#) (which was an inadvertent duplication of Fig 2C), the middle and bottom panel of [Fig 6B](#) and the three panels in [Fig 8A](#) that were originally published in this article. These errors do not affect the conclusions of the article. The authors wish to correct these figures in order to demonstrate the reproducibility of data presented in [Fig 4](#), [Fig 6B](#) and [Fig 8A](#) of this article. The authors present results from replicate experiments performed as independent confirmation of the published data (collected in 2007). The corrected data has been verified by the *PLOS Biology* Editors.

The corrected versions of Figs [4](#), [6](#) and [8](#) are included here.



OPEN ACCESS

Citation: Burch-Smith TM, Schiff M, Caplan JL, Tsao J, Czymmek K, Dinesh-Kumar SP (2016) Correction: A Novel Role for the TIR Domain in Association with Pathogen-Derived Elicitors. *PLoS Biol* 14(1): e1002374. doi:10.1371/journal.pbio.1002374

Published: January 25, 2016

Copyright: © 2016 Burch-Smith et al. This is an open access article distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

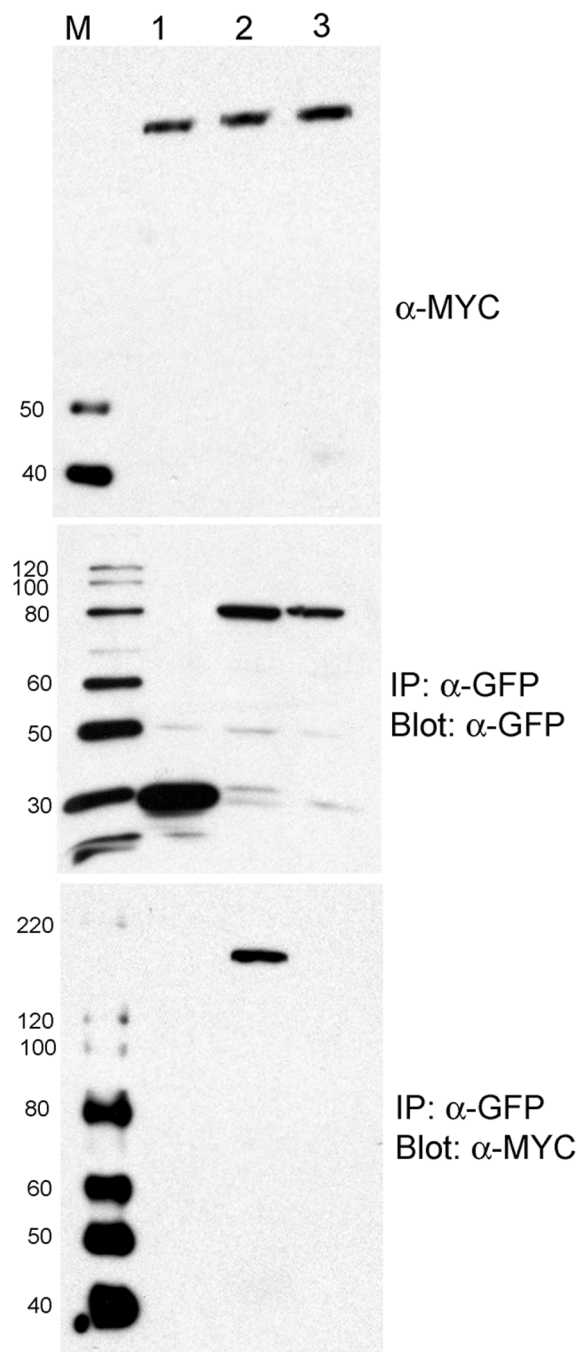


Fig 4. N Co-Immunoprecipitates with p50-U1, but Not with p50-U1-Ob Fig 4. N associates with p50-U1. Total protein extracts from *N. benthamiana* leaves transiently coexpressing gN-TAP (top panel, lanes 1–3) and Cerulean alone (middle panel, lane 1), p50-U1-Cerulean (middle panel, lane 2), or p50-U1-Ob-Cerulean (middle panel, lane 3) were pulled down using anti-GFP antibodies. gN-TAP was present in a complex with p50-U1-Cerulean (bottom panel, lane 2), but not with Cerulean (bottom panel, lane 1) or p50-U1-Ob-Cerulean (bottom panel, lane 3).

doi:10.1371/journal.pbio.1002374.g001

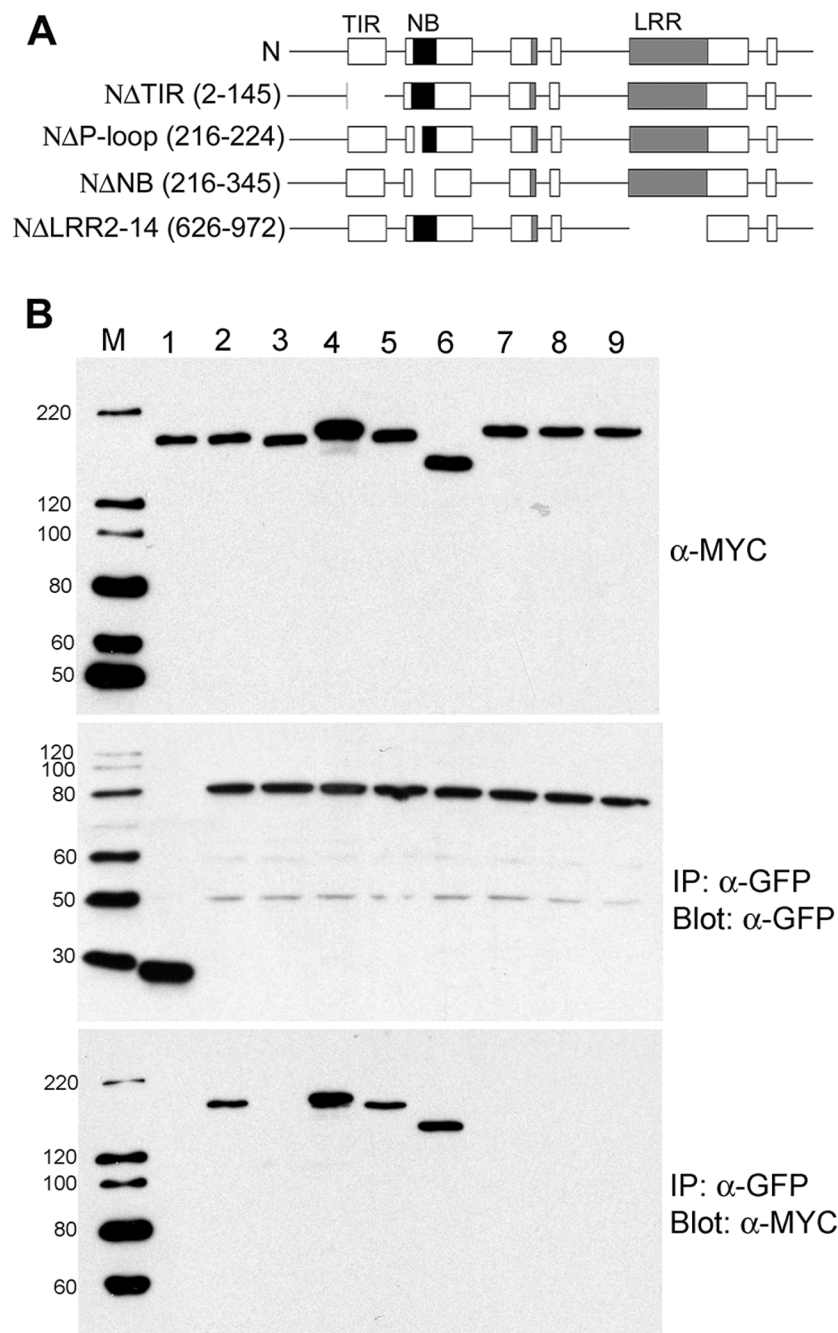


Fig 6. p50-U1 Fails to Associate with N TIR Mutants (A) N and deletion mutants used to determine the domain required for association with p50. Numbers in parentheses are deleted amino acid residues. Not drawn to scale. (B) gN-TAP and gN-mutant-TAP proteins were tested for their association with p50-U1-Cerulean by coimmunoprecipitation. Input of N and its mutants are shown in top panel and Cerulean or Cerulean-tagged proteins are shown in the middle panel. Bottom panel shows coimmunoprecipitation results. gN-TAP + Cerulean (lane 1); gN TAP + p50-U1-Cerulean (lane 2); NΔTIR-TAP + p50-U1-Cerulean (lane 3); NΔP-loop-TAP + p50-U1-Cerulean (lane 4); NΔNB-TAP + p50-U1-Cerulean (lane 5); NΔLRR2-14-TAP + p50-U1-Cerulean (lane 6); N(D46H)TAP + p50-U1-Cerulean (lane 7); N(W141S)TAP + p50-U1-Cerulean (lane 8); and gN-TAP + p50-U1-Ob-Cerulean (lane 9). NΔTIR-TAP and N-TIR point mutants do not coimmunoprecipitate with p50-U1-Cerulean. Lane M is the size marker, and protein size is in kDa.

doi:10.1371/journal.pbio.1002374.g002

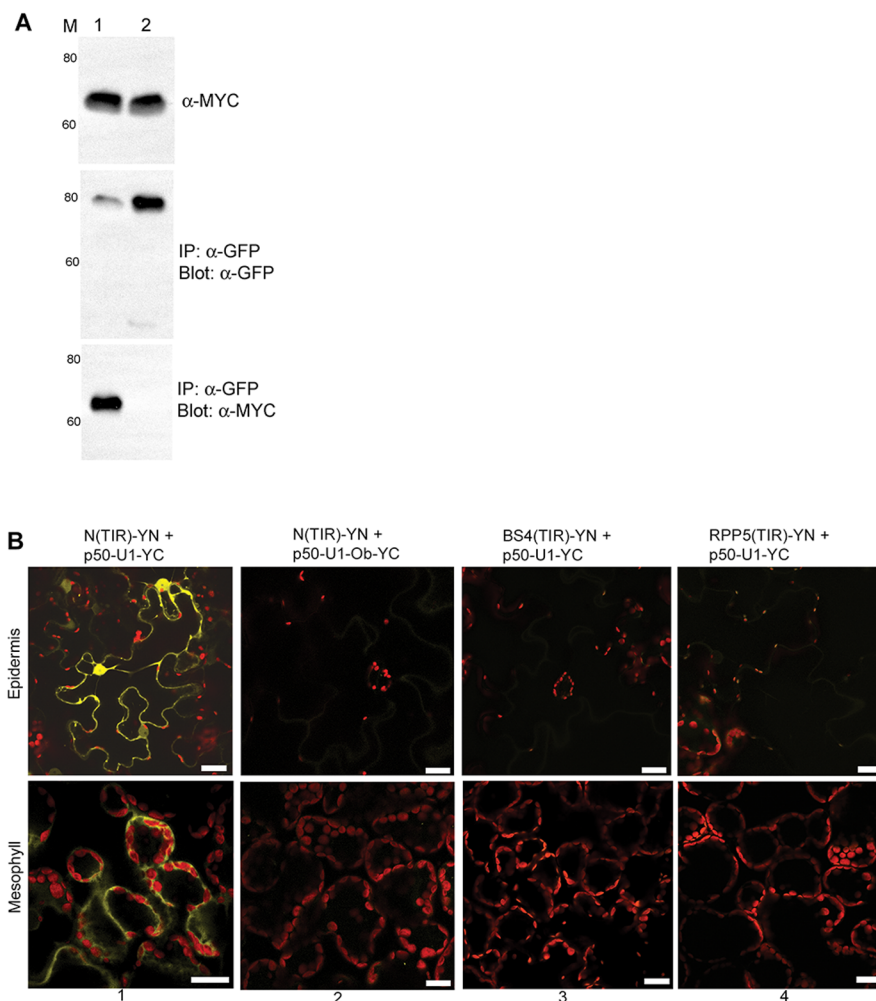


Fig 8. N's TIR Domain Is Sufficient for Association with p50-U1 (A) Co-immunoprecipitation of gN-TIR-TAP and p50-U1-Cerulean. N's TIR domain was expressed under the control of N's endogenous 5' and 3' regulatory regions. Extracts from tissue co-expressing N(TIR)-TAP (top panel, lanes 1 and 2) and p50-U1-Cerulean (middle panel, lane 1) or p50-U1-Ob-Cerulean (middle panel, lane 2) were pulled down with anti-GFP antibodies. N(TIR)-TAP was pulled down with p50-U1-Cerulean (bottom panel, lane 1), but not with p50-U1-Ob-Cerulean (bottom panel, lane 2). Lane M is the size marker, and protein sizes are shown in kDa. (B) BiFC between N(TIR)-YN and p50-U1-YC. N(TIR)-YN exhibits BiFC with p50-U1-YC (column 1), but not with p50-U1-Ob-YC (column 2). The TIR domains of two related R proteins, BS4 and RPP5, were tested for their ability to associate in vivo with p50-U1-YC. BS4(TIR)-YC and RPP5(TIR)-YC were coexpressed with p50-U1-YC, but were unable to exhibit BiFC (columns 3 and 4, respectively). Scale bar represents 20 μ m.

doi:10.1371/journal.pbio.1002374.g003

Reference

1. Burch-Smith TM, Schiff M, Caplan JL, Tsao J, Czymmek K, Dinesh-Kumar SP (2007) A Novel Role for the TIR Domain in Association with Pathogen-Derived Elicitors. *PLoS Biol* 5(3): e68. doi:[10.1371/journal.pbio.0050068](https://doi.org/10.1371/journal.pbio.0050068) PMID: [17298188](https://pubmed.ncbi.nlm.nih.gov/17298188/)